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If a sketch cannot be made, then next in importance to the color of the spores is the color of the specimen, its form, size, etc. In another paper I will give a synopsis for the study and description of an Agaric.

The aids to the study of the Agaricini are, as in the other classes, cheifly foreign, while the descriptions of the native species are scattered in various publication, some of them inaccessible to the student; so that in reference to many species he is obliged to depend upon the friendly aid of some specialist. The text-book covering the most species is the Hymenomycetes Europæi of Fries, written in Latin. Cook's Handbook of British Fungi is an excellent treatise in English and is now in course of republication. The reports of the New York State Museum of Natural History from the twenty-third to the twenty-fourth inclusive, contains the most important publications on Fungi that have yet been made in this country; they are the work of the most accomplished American mycologist, Prof. Chas. H. Peck. The Illustrations of the British Fungi by Dr. M. C. Cooke are invaluable in the study of the Agaricini; they are now in course of publication, and twenty-eight parts have been issued, not yet completing the genus Agaricus.

NEW FUNGI.

BY J. B. ELLIS AND B. M. EVERHART.

PEZIZA DINEMASPORIOIDES, E. & E.—Attached by a central point, black, bristly, minute, consisting of a basal membrane of cellulose-fibrose structure, with a subfimbriate margin and subtended by long(300—400 *u*), black, spreading, bristle-like hairs, the whole much resembling a minute *Dinemasporium*. Asci 90—100 x 8—10 *u*, gradually narrowed to the base. Paraphyses filiform; sporidia also filiform, multinucleate, yellowish or nearly hyaline, ½—⅔ as long as the asci.

On basal sheaths of dead *Andropogon*, Newfield, N. J., Oct. 1884.

HYPOREA DIGITATA, E. & E.—Stroma yellowish, digitate, radiating from a central point and dividing into numerous (2mm. in diam.), semi-cylindrical, finger-like lobes closely appressed to and surrounding the branch and extending longitudinally about 5 cm. Perithecia numerous, globose, small, with hyaline contents and black, slightly projecting ostiola. Asci cylindrical, 80—90 *u* long. Sporidia crowded or overlapping, oblong, subhyaline, 1-septate, granular, slightly curved, 20—26 x 6—8 *u*.

On a dead limb, at the "Notch" in the White Mountains, N. H, Sept. 1884. Miss S. Minns.

In the single specimen seen, the central part of the stroma was partially decayed while the digitate extremities were still fresh. Belongs in subgenus *Clintoniella*, Sacc., Syll. II, p. 532.

Leptosphæria Spartinæ, E. & E.—Perithecia gregarious (about ¼ mm.), covered by the blackened cuticle which is raised into little prominences over them and pierced by the papilliform and at length broadly perforated ostiolum. Asci 115—120 x 12—15 *u*, surrounded by abundant paraphyses and containing eight two-ranked, broadly fusiform, pale-yellowish, 5-septate, 35—45 x 8—10 *u* sporidia.

Leptosphæria sticta, E. & E.—Perithecia scattered, subovate, membranaceous, buried under the blackened epidermis, which is pierced but not raised by the punctiform ostiola. Asci 100—125 x 15—20 *u*, with abundant paraphyses. Sporidia 1 or 2-seriate, fusiform, pale yellow, 5-septate, very slightly constricted at the septa, ends obtuse, 30—40 x 7—9 *u*.

Distinguished by its *punctiform* ostiola, which are the only outward indication of the buried perithecia. The ostiola are much the same as in *Hypoxylon punctulatum*, B. & Rav. appearing under the lens like punctures made by the point of a pin. The fruit is scarcely different from that of the preceding species.

In this and the next species, the part of the culm occupied by the perithecia is uniformly blackened.

Leptosphæria marina, E. & E.—Perithecia irregularly scattered, subelliptical, (½—¾mm.), upper part hemispheric-conic, projecting, closely covered by the blackened epidermis, apex subtruncate with a papiliform ostiolum which is soon deciduous, leaving a broad opening. Asci 112—150 x 25—35 *u*, narrowed into a substipitate base. Sporidia 2—3 seriate, fusiform or clavate-fusiform, yellowish, 1—3-septate (mostly 1-septate), slightly constricted at the middle, septum, 50—60 x 10—12 *u*, ends subobtuse. In this case, the greater number of septa does not seem to indicate maturity. The perithecia are more prominent and the sporidia much longer than in *L. discors*, S. & E.

This and the two proceding species were collected during the summer of 1884, by Mrs. Caroline Treat at Cape May, N. J., on dead culms of *Spartina* lying on the beach.

Leptosphæria clavicarpa, E. & E.—Perithecia mostly seriate in lines ¼—1 cm. long, covered by the blackened epidermis which is raised into a ridge above them and perforated by the inconspicuous ostiola. Asci broad, oblong-cylindrical, 75—100 x 22—25 *u*, obtuse, with a short, narrow base. Paraphyses filiform. Sporidia crowded in several series, clavate-oblong, slightly curved, obtuse and rounded above, narrowed rather abruptly below, 7—9 septate, and when mature, deep yellow-brown, 25—40 x 8—10 *u*, only slightly constricted at the septa. Spermatia in similar perithecia, oblong-cylindrical, slightly curved, hyaline, 3—5 x 1¼ *u*.

The general appearance is that of *Sphæria orthogramma*, B. & C. *Leptosphæria culmifraga* (Fr.) has longer, narrower sporidia, and the perithecia are not usually so distinctly seriate. Found on dead culms of

Phragmitis communis, at Spirit Lake, Iowa, Jan. 1884, by Prof. J. C. Arthur.

SPHÆRELLA THALICTRI, E. & E.—Perithecea hypophyllous, 90 *u* in diameter, of course, cellular structure, with a rather large opening above, hemispheric, (flattened when dry,) scattered on small 2—3 mm.), round, white spots with a dark border. Asci sessile, about 36 x 7 *u*. Sporidia crowded, ovate-oblong, granular and nucleate, (becoming uniseptate?) 12—16 x 3—4½ *u*.

On leaves of *Thalictrum dioicum*, Parsippany, N. J., Prof. Wm. Trelease. Sent also from Iowa by Mr. E. W. Holway.

SEPTORIA DIERVILLÆ, E. & E. Spots dark brown (2—3 mm.), mostly with a thick, swollen, raised border which is more pronounced on the upper side of the leaf and more or less shaded purplish black. Perithecia hypophyllous, small, black, innate-erumpent. Spores thread-like, often strongly curved, nucleolate, 25—35 x 1½ *u*, with a slight greenish tinge.

On living leaves of *Diervilla trifida*, Magnolia, Mass., summer of 1884. Miss C. H. Clarke.

MELANCONIUM GRACILE, E. & E.—Pustules rather prominent, bursting out in a seriate manner through longitudinal cracks in the bark. Stroma minute, whitish. Spores oblong-cylindrical, pale brown, 15—18 x 4—5 *u*, oozing out in a dull black mass.

On dead limbs of hickory, Plainfield, N. J., Geo. F. Meschutt.

GYMNOSPORIUM GRAMINEUM, E. & E.—Forming small, black, elongated or round patches 1—3 mm. in diameter, with the general aspect of *Torula herbarum*, Lk. Spores globose or subovate, 3—4 *u*.

On dead culms and leaves of *Arundinariæ*, "Low Country," South Carolina, June, 1884, H. W. Ravenel.

Quite distinct from *G. inquinaus*, Berk, which also occurs on *Arundinaria*.

MONILIA DIFFUSA, E. & E.—Forms a thin, ferruginous stratum on the matrix. Hyphæ inconspicuous, branching into chains of 6—10 acutely elliptical, simple, subfuscous, spores 7—10 x 3—4 *u* and separated from each other by a short, hyaline connecting cell.

On rotten wood, White Mountains, N. H., Sept. 1884; Miss S. Minns.

GRAPHIUM LINDERÆ, E. & E.—Amphigenous but mostly hypophyllous, on large (½—1 cm.) indefinitely limited spots of a light yellow color at first but becoming dark brown and sometimes confluent. Hyphæ erect, simple, nearly straight, septate, brown, 25—30 x 4—5 *u*, forming little pencil-like fascicles thickly scattered over the affected part of the leaf and bearing at their tips the clavate-cylindrical, brown, multiseptate conidia, 75—85 x 6—7 *u*.

This much resembles *G. clavisporum*, B. & C.